www.azulmarina.com

Precision by ViewSonic®

Home Theater Projector

User's Manual

ENG

FRN

ESP

www.azulmarina.com ventas@azulmarina.com

Compliance Information

FCC Statement

This device complies with part 15 of FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Warning: You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

For Canada

- This Class B digital apparatus complies with Canadian ICES-003.
- Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

CE Conformity for European Countries

CE The device complies with the requirements of the EEC directive 2004/108/EC as amended by 92/31/EEC and 93/68/EEC Art.5 with regard to “Electromagnetic compatibility”, and 2006/95/EC as amended by 93/68/EEC Art.13 with regard to “Safety.”

Following information is only for EU-member states:

The mark shown to the right is in compliance with the Waste Electrical and Electronic Equipment Directive 2002/96/EC (WEEE).
The mark indicates the requirement NOT to dispose the equipment as unsorted municipal waste, but use the return and collection systems according to local law.

Important Safety Instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this unit near water.
6. Clean with a soft, dry cloth. If still not clean, see “Cleaning the Display” in this guide for further instructions.
7. Do not block any ventilation openings. Install the unit in accordance with the manufacturer’s instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other devices (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade and the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs. Convenience receptacles and the point where they exit from the unit. Be sure that the power outlet is located near the unit so that it is easily accessible.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the unit. When a cart is used, use caution when moving the cart/unit combination to avoid injury from tipping over.
13. Unplug this unit when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the unit has been damaged in any way, such as: if the power-supply cord or plug is damaged, if liquid is spilled onto or objects fall into the unit, if the unit is exposed to rain or moisture, or if the unit does not operate normally or has been dropped.

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Declaration of RoHS Compliance

This product has been designed and manufactured in compliance with Directive 2002/95/EC of the European Parliament and the Council on restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS Directive) and is deemed to comply with the maximum concentration values issued by the European Technical Adaptation Committee (TAC) as shown below:

Substance	Proposed Maximum Concentration	Actual Concentration
Lead (Pb)	0.1%	< 0.1%
Mercury (Hg)	0.1%	< 0.1%
Cadmium (Cd)	0.01%	< 0.01%
Hexavalent Chromium (Cr^{6+})	0.1%	< 0.1%
Polybrominated biphenyls (PBB)	0.1%	< 0.1%
Polybrominated diphenyl ethers (PBDE)	0.1%	< 0.1%

Certain components of products as stated above are exempted under the Annex of the RoHS Directives as noted below:

Examples of exempted components are:

1. Mercury in compact fluorescent lamps not exceeding 5 mg per lamp and in other lamps not specifically mentioned in the Annex of RoHS Directive.
2. Lead in glass of cathode ray tubes, electronic components, fluorescent tubes, and electronic ceramic parts (e.g. piezoelectronic devices).
3. Lead in high temperature type solders (i.e. lead-based alloys containing 85% by weight or more lead).
4. Lead as an allotting element in steel containing up to 0.35% lead by weight, aluminium containing up to 0.4% lead by weight and as a cooper alloy containing up to 4% lead by weight.

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Product Registration

To meet your future needs, and to receive any additional product information as it becomes available, please register your product on the Internet at: www.viewsonic.com. The ViewSonic® Wizard CD-ROM also provides an opportunity for you to print the registration form, which you may mail or fax to ViewSonic.

For Your Records

Product Name:	Pro8100 Home Theater Projector
Model Number:	VS11856
Document Number:	Pro8100_UG_ENG Rev. 1C 04-16-08
Serial Number:	_____
Purchase Date:	_____

The lamp in this product contains mercury.
Please dispose of in accordance with local, state or federal laws.

Table of Contents

Compliance Information.....i

FCC Statement
For Canada
CE Conformity for European Countries
Following information is only for EU-member states
Important Safety Instructions
Declaration of RoHS Compliance
Copyright Information
Product Registration

Chapter 1: Introduction.....1

Projector Features
Notes on the AC Power Cord
Package Contents
Projector Overview
Control Panel
Connection ports
Remote Control
Installing the Batteries
Remote Control Operation

Chapter 2: Installation.....6

Power connection
Audio and Video Devices Connectivity Configuration
Adjusting the Projected Image
Adjusting Projection Image Size
Projection Screen Selection

Chapter 3: Remote Control direct acess.....12

Picture Modes
Color Temperature
PCS (Precision Color System)
HQV
Black Level
Daylight Sensor
Input Source Select
Direct Input Keys
Aspect Ratio
Overscan
Freeze
Keystone
Zoom and Focus
Lens Shift
Power
Light

Chapter 4: ADVANCED OPERATION (OSD Menu).....20

1. Main Menu
2. Setup Menu
   2-1. Picture Sub-Menu
      2-1-1 Basic Sub-Menu
      2-1-2 Color Temperature Sub-Menu
      2-1-3 Image Adjust Sub-Menu
      2-1-4 Aspect Ratio
      2-1-5 Overscan
      2-1-6 Geometry Adjust
   2-2. Advanced Sub-Menu
      2-2-1 Picture Mode
      2-2-2 Black Level
      2-2-3 HQV
      2-2-4 Noise Reduction
      2-2-5 Color Space
   2-3 Config Sub-Menu
      2-3-1 Projector Settings
      2-3-2 OSD
      2-3-3 Languages
      2-3-4 Timers
      2-3-5 High Altitude
      2-3-6 Auto Iris
   2-4 PCS Settings Sub-Menu
      2-4-1 PCS
      2-4-2 PCS Display
      2-4-3 Flesh tone
      2-4-4 Edge Enhancement
      2-4-5 Gamma Correction
      2-4-6 3D Color Management
   2-5 Memory Settings Sub-Menu
      2-5-1 Custom Color Temperature
      2-5-2 Save
      2-5-3 Load
      2-5-4 Reset
      2-5-5 System Status Screen

Chapter 5: Making and Recalling the User Adjustments.....42

Making Adjustments
   1-1. User Picture Mode Adjustments
   1-2. User Color Temperature Adjustments
   1-3. User PCS Adjustments
   2-1 Recalling the User Picture Mode & Color Temperature
   2-2 Recalling the User PCS Adjustments
   2-3 Recalling Both User Picture Mode and User PCS (Custom 1 & 2)

Appendix.....46

Maintenance
Cleaning the Lens
Cleaning the Projector Housing
Maintaining the Air Filter
Replacing the Air Filter
Replacing the Lamp
Troubleshooting
List of Compatible Signals
LED Indicator Message
Product Specification
RS232 command code
Remote control code
Customer Support
Limited Warranty

Chapter 1: Introduction

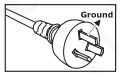
Projector Features

The projector integrates high-performance optical engine projection and a user-friendly design to deliver high reliability and ease of use.

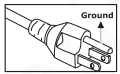
- 1080P (1920x1080) Full HD native resolution.
- C^2 Fine™ LCD panel for superior performance.
- Silicon Optix HQV™ for highest quality video.
- Precision Color System for true color image enhancement.
- Power horizontal and vertical lens shift.
- HDMI 1.3 support with HDCP compliance.
- 1.6x power optical zoom lens.
- Auto-iris enables high contrast to produce deeper black levels.
- Daylight sensor for auto setting based on ambient light conditions.
- 1080p 24fps capable
- Full discrete IR and RS-232 command codes

Notes on the AC Power Cord

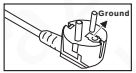
AC Power Cord must meet the requirement of countries where you use this projector. Please confirm your AC plug type with the graphics below and ensure that the proper AC Power Cord is used. If the supplied AC Power Cord does not match your AC outlet, please contact your sales dealer. This projector is equipped with a grounding type AC line plug. Please ensure that your outlet fits the plug. Do not defeat the safety purpose of this grounding type plug. We highly recommend using a video source device also equipped with a grounding type AC line plug to prevent signal interference due to voltage fluctuations.



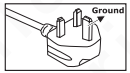
For Australia and Mainland China



For the U.S.A. and Canada



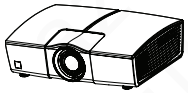
For Continental Europe



For the U.K.

Package Contents

When you unpack the projector, make sure you have all these components:


Projector

Projector dust cover

Component (RCA) cable

Power cord

HDMI cable

Micro-fiber wiping cloth

Batteries

Remote control

Quick start guide

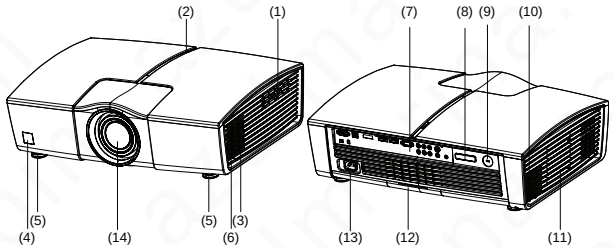
User Guide

1. Projector
2. Projector dust cover. x1
3. Component (RCA) cable x1
4. Power cord x1
5. HDMI cable x1
6. Micro-fiber wiping cloth. x1
7. AA size batteries for remote control x 2
8. Remote control x1
9. Quick start guide x1
10. User Guide x1

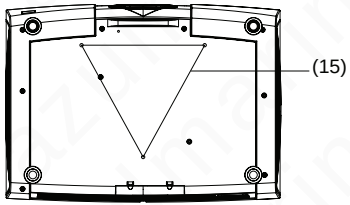
« NOTE »

- Save the original shipping carton and packing material; they will come in handy if you ever to ship your unit. For maximum protection, repack your unit as it was originally packed at the factory.
- Accessories and components may vary by retailer and region.

Projector Overview



1. Control panel
2. LED indicator
3. Air inlet grille
4. Front IR remote control sensor
5. Elevation foot
6. Elevation button
7. Connection ports
8. Rear IR remote control sensor
9. Kensington lock
10. Air outlet grille
11. Lamp cover
12. Air filter cover
13. AC power socket
14. Projection lens
15. Ceiling mount (3-M6)

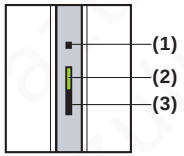


« NOTE »

- This projector can be used with a ceiling mount for support. The ceiling mount is not included in the package.

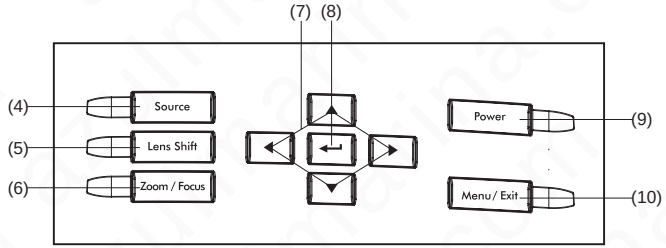
Control Panel

LED indicator:



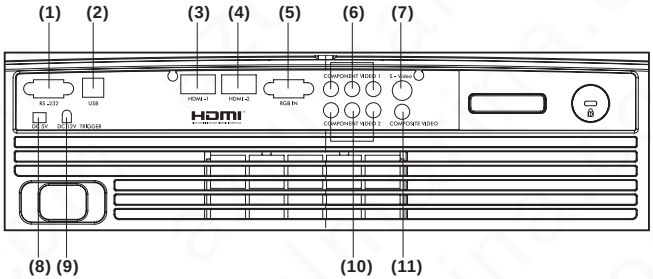
1. Daylight sensor.
2. Power indicator
   Refer to "LED Indicator Message" (Page 50).
3. Status indicator
   Refer to "LED Indicator Message" (Page 50).

Button Function:



4. Source
   Manually selects an input source.
5. Lens Shift
   Motorized vertical and horizontal lens shift for positioning display image without physically moving the unit.
6. Zoom/Focus
   Motorized zoom and focus adjust.
7. Four directional buttons
   Use four directional buttons to select items or make adjustments to your selections.
8. Enter
   To confirm selected menu item.
9. Power
   Turn on or off the projector.
10. Menu/Exit
    Opens and Exits the on-screen menu.

Connection ports



1. RS-232 terminal

   When operating the projector via a computer, connect this to the controlling computer's RS-232C port.

2. USB terminal (Service purpose)

   This connector is for firmware upgrade.

3. HDMI-1 terminal

   Interface for digital video.

4. HDMI-2 terminal

   Interface for digital video.

5. RGB IN terminal

   Connects PC input signal (analog) to this jack.

6. COMPONENT VIDEO 1 terminals

   Analog/digital video interface transmits via three separate signals - Y, Cb/Pb, Cr/Pr.

7. S-VIDEO terminal

   Connects S-Video output from video equipment to this jack.

8. DC 5V terminal

9. DC 12V TRIGGER terminal

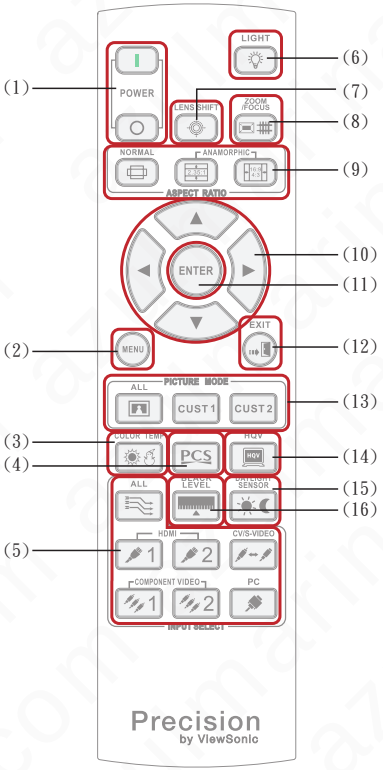
10. COMPONENT VIDEO 2 terminals

    Analog/digital video interface transmits via three separate signals - Y, Cb/Pb, Cr/Pr.

11. COMPOSITE VIDEO terminal

    Connects composite video output from video equipment to this jack.

Remote Control



1. **POWER**

   Power On: Discrete power on key.

   Power Off: Discrete power off key.

2. **MENU**

   Opens and Exits the on-screen menu.

3. **COLOR TEMP**

   Selections of color shading. Browse through factory defaults and user color temp.

4. PCS

Selection of PCS mode.

PCS On: Use ViewSonic default PCS settings.

USER: Use user defined PCS settings.

PCS Off: Turn off all PCS settings.

5. INPUT SELECT

All: Browse through HDMI 1/2, Component Video 1/2, Composite, S-Video and PC inputs.

HDMI 1: Direct access key for HDMI 1 input.

HDMI 2: Direct access key for HDMI 2 input.

Component Video 1: Direct access key for Component Video 1.

Component Video 2: Direct access key for Component Video 2.

Composite Video and S-Video selection. Browse through Composite Video and S-Video inputs.

PC: Direct access key for PC input.

6. LIGHT

Keypad Light Enable. Keypad will also light up if any other remote control key is pressed.

7. LENS SHIFT

Motorized vertical and horizontal lens shift for positioning display image without physically moving the unit.

8. ZOOM/FOCUS

Motorized zoom and focus adjust.

9. ASPECT RATIO

Selections of screen proportion.

Normal: Browse through Standard, Full Screen, Crop and Flexview aspect ratios.

Anamorphic 1: Use in conjunction of 16:9 to 2:35:1 conversion lens.

Anamorphic 2: Use in conjunction of 16:9 to 2:35:1 conversion lens.

Note: Requires use of optional .Anamorphic lens. ViewSonic does not provide this optional lens. For more details on where to purchase the Anamorphic 2.35:1 lens, please visit www.viewsonic.com

10. FOUR DIRECTIONAL BUTTONS

Use four directional buttons to select items or make adjustments to your selection.

11. ENTER

To confirm selected menu item.

12. EXIT

To Exits the on-screen menu or Cancel the current OSD selection.

13. PICTURE MODE

Selections of picture modes, for easy access to ViewSonic customized presets and customized settings.

All: Browse through Normal, Vivid, Cinema and Professional picture mode.

Custom 1: Recall customized setting 1.

Custom 2: Recall customized setting 2.

14. HQV

HQV enable.

On: Use ViewSonic default HQV settings.

Off: Turn off all HQV settings.

Note: User defined HQV settings can only be accessed in the OSD.

15. DAYLIGHT SENSOR

Daylight sensor enable.

Auto: Daylight mode bases on light sensor detection.

Manual: Manually selects daylight mode.

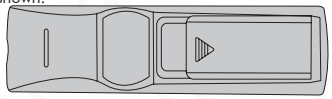
Off: Turn off daylight mode.

16. BLACK LEVEL

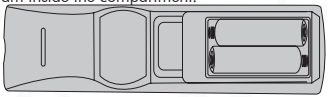
Defines the brightness levels at the darkest visual image point.

Installing the Batteries

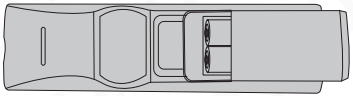
1. Open the battery cover in the direction shown.



2. Install batteries as indicated by the diagram inside the compartment.



3. Close the battery cover into position.



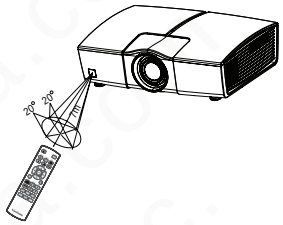
« NOTE »

- Keep the batteries out of the reach of children. There is a danger of death by accidentally swallowing the battery.
- Remove batteries from remote control when not being used for extended periods.
- Do not dispose of the used battery along with household waste. Dispose of used batteries according to local regulations.
- Danger of explosion may occur if batteries are incorrectly replaced. Replace all the batteries with new ones.

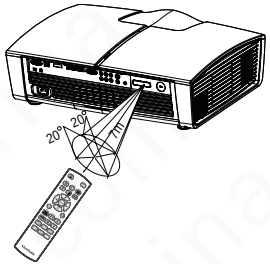
Remote Control Operation

Point the remote control at the infrared remote sensor and press a button.

- Operating the projector from the front



- Operating the projector from the rear



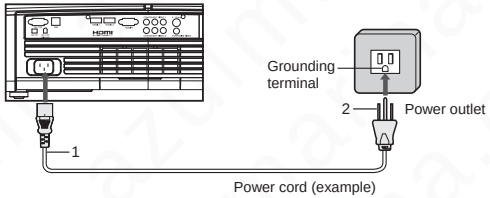
« NOTE »

- Do not point the LED light pointer directly to the people's eyes (especially small children). There is a danger of injury to the eyes.
- The remote control may not operate when there is sunlight or other strong light such as a fluorescent lamp shining on the remote sensor.
- Operate the remote control from a position where the remote sensor is visible.
- Do not drop the remote control or jolt it.
- Keep the remote control out of locations with excessively high temperature or humidity.
- Do not get water on the remote control or place wet objects on it.
- Do not disassemble the remote control.

Chapter 2: Installation

Power connection

1. Remove the projector lens cap.
2. Plug the attached power cord into the AC power socket of this projector.
3. Plug the other end of the power cord into a power outlet.



- The power cords for use in the U.S., UK and Europe are included with this projector. Use the appropriate one for your country.
- This projector uses the power plug of three-pin grounding type. Do not remove the grounding pin from the power plug. If the power plug doesn't fit your wall outlet, ask an electrician to change the wall outlet.
- The provided power cord for the U.S. is rated at 120 V. Never connect this cord to any outlet or power supply using other voltages or frequencies than rated. If you use a power supply using other voltage than rated, prepare an appropriate power cord separately.
- Use 100-240 V AC 50/60 Hz to prevent fire or electric shock.
- Do not place any objects on the power cord or do not place the projector near heat sources to prevent damage to the power cord. If the power cord should be damaged, contact your dealer for replacement because it may cause fire or electric shock.
- Do not modify or alter the power cord. If the power cord is modified or altered, it may cause fi re or electric shock.

Caution:

- Plug in the power cord firmly. When unplugging, hold and pull the power plug, not the power cord.
- Do not plug in or out the power cord with your hand wet. It may cause electric shock.

Audio and Video Devices Connectivity Configuration

ViewSonic Pro8100 offers a full complementary video input connectivity - from the hi-tech HDMI to the basic composite video.

There are vast possibilities of audio & video connectivity configurations user can choose from. However the best setup combination relies on user's equipments and using preferences.

Please seek professional advice for best matching setup. The video input type priority sequence is listed below:

- HDMI
- Component Video
- S-Video
- Composite Video

The illustration below shows some recommended setup configuration possibilities.

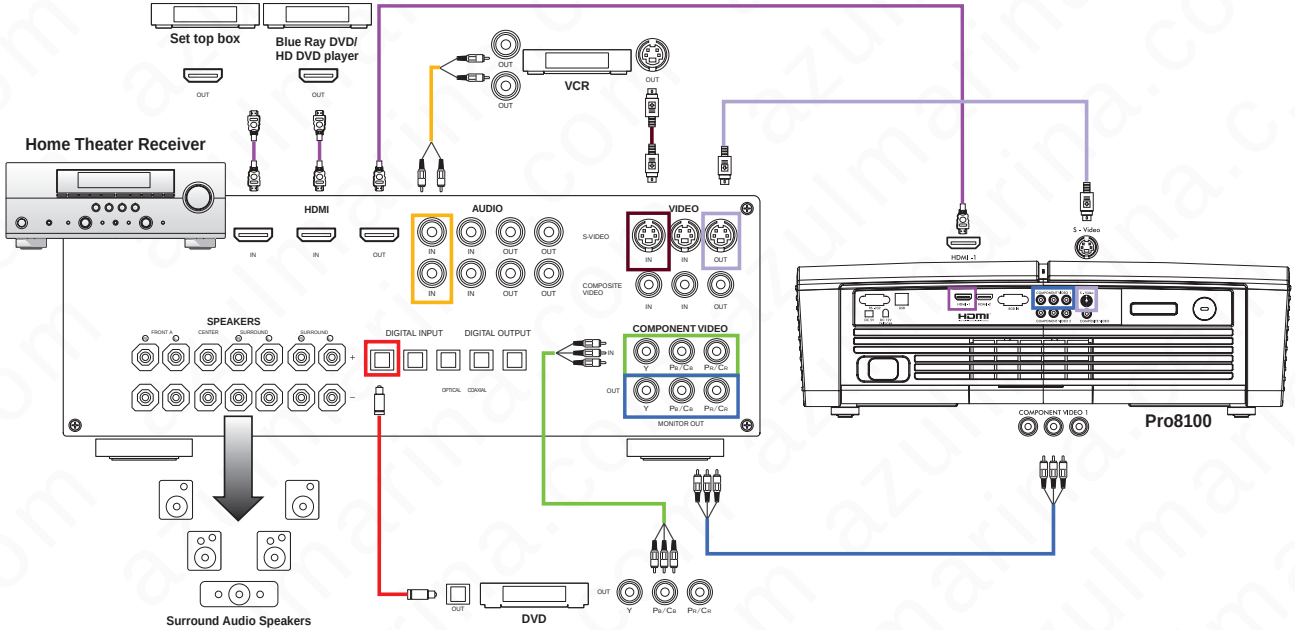
A. Using Home Theater System as hub

This setup is recommended if a highly sophisticated home theater system is available.

This setup offers a great ease on utility for user, since settings of both audio and video can be changed without manual matching.

Pros: Eliminate audio and video source matching between projector and audio amplifier. Increase number of connecting devices. Reduce cabling to the projector.

Cons: High cost.



Note: The illustrated home theater receiver contains HDMI out, component video out, S-Video out and composite video out. Not all home theater receiver has full complementary of video output.

B. Using Projector as hub

This setup is recommended for low to mid range home theater system.

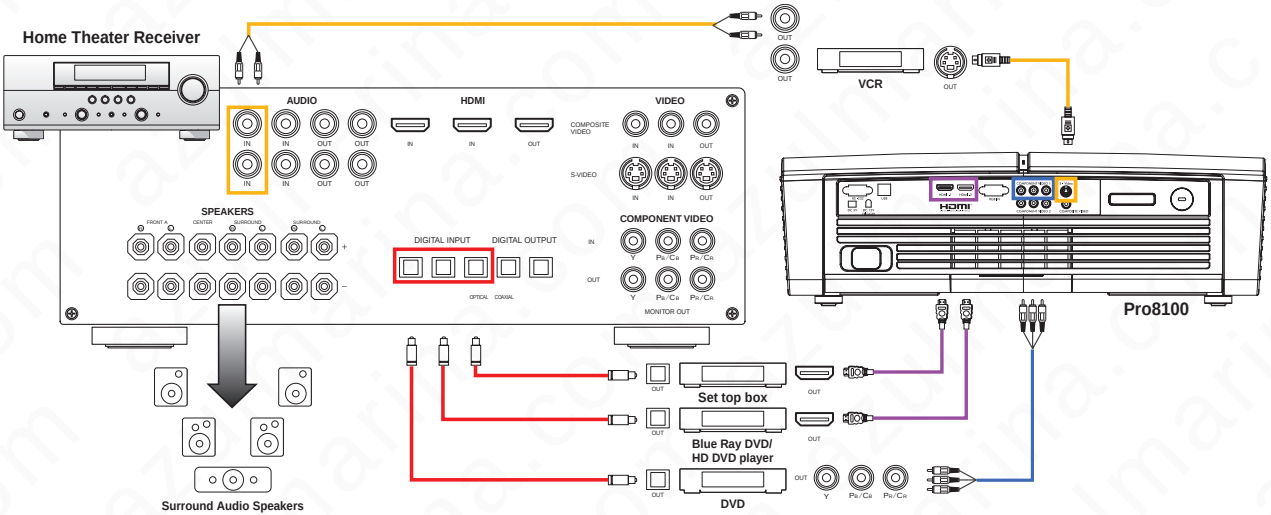
When changing input source, both projector and home theater system's remote controls need to be activated.

Projector and home theater system controls can be centralizing controlled by 3rd party's home appliances control system (Projector is via RS232).

Please seek professional advice for best suited type of home appliances control system.

Pros: Low budget.

Cons: It is required to match audio and video sources between projector and audio amplifier manually. Masses of routing cables need to be connected to projector.



C. Connecting Cable or Satellite TV

There's no build-in TV tuner in ViewSonic Pro8100.

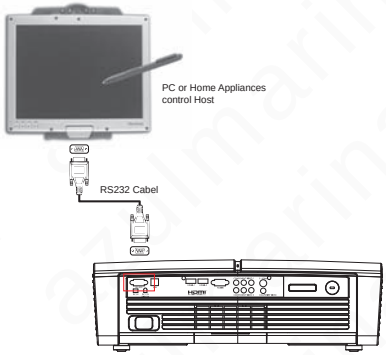
It will only take direct video output (HDMI, Component Video, S-Video or Composite Video.) with cable or satellite set-top-box.

Please use by the recommended input priority order.

Please to use HDMI or Component Video connection only if cable or satellite offers HDTV signals (Check with cable or satellite TV provider.).

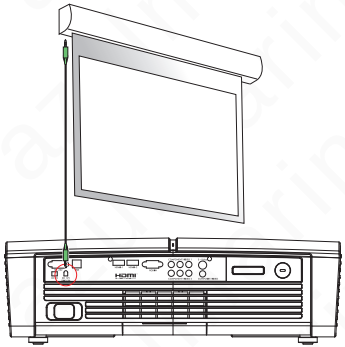
D. RS232 Connection

The illustration shows the connection to a home appliances control device. ViewSonic Pro8100's RS232 command code table and setup protocol are listed in the Appendix section.



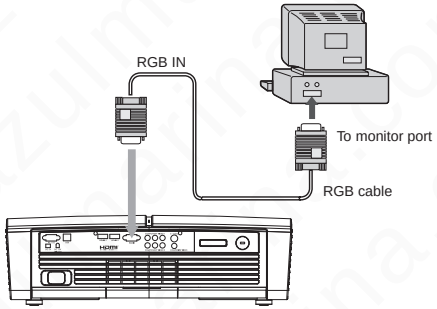
E. 12V Screen Curtain Trigger

ViewSonic Pro8100 offers a 12V trigger control pulse upon power-on and power-off. This 12V trigger pulse can be utilized to motor drive of a home theater's curtain or a drop-down projection screen.



F. PC Input

ViewSonic Pro8100 can take analog PC video signal by RGB IN (Shown in the illustration below.).



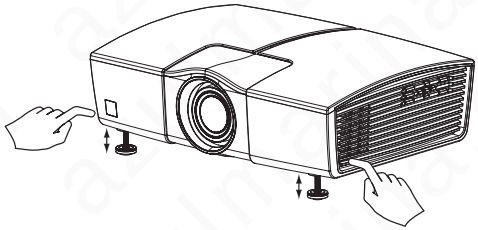
« NOTE »

- When connecting cable, power cords of both a projector and external equipment should be disconnected from AC outlet.
- The figure above is a sample connection. This does not mean that all of these devices can or must be connected simultaneously.
- The cables that come with the projector may differ from the above illustration. The included cables are based on actual shipment delivery.

ENG

Adjusting the Projected Image

Adjusting the Projector Height



The projector is equipped with two elevation feet to adjust the image height.

To raise the image:

1. Press the elevation button.
2. Raise the image to the desired height angle, then release the button to lock the elevation foot into position.

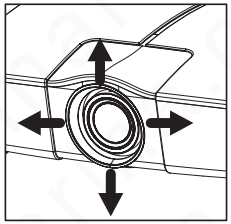
To lower the image:

1. Press the elevation button.
2. Lower the image, then release the button to lock the elevation feet into position.

« NOTE »

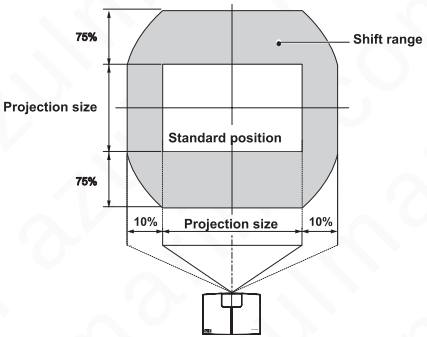
- To avoid damaging the projector, make sure that the elevation feet are fully retracted before placing the projector in its package.

Adjusting the Projector Lens Position



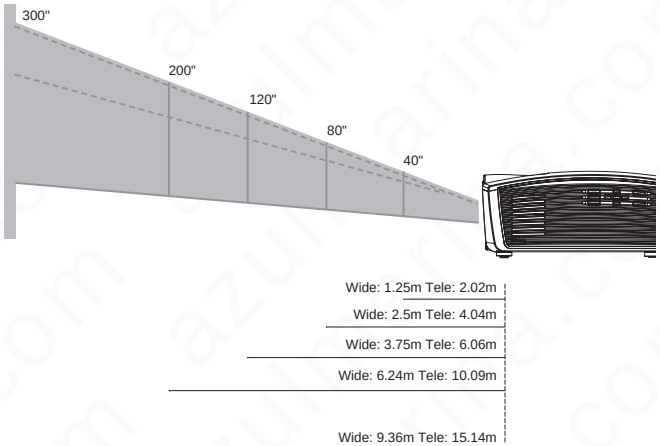
1. Press the Lens Shift button.
2. Use four directional buttons to adjust the lens position.

The adjustable projection range



Adjusting Projection Image Size

Refer to the graphic and table below to determine the screen size and projection distance.



Screen Size (Diagonal)	16 : 9 Screen			
	Wide Projection Distance		Tele Projection Distance	
	m	inch	m	inch
40″	1.25	49.2	2.02	79.5
50″	1.56	61.5	2.52	99.4
60″	1.87	73.7	3.03	119.2
70″	2.19	86.0	3.53	139.1
80″	2.50	98.3	4.04	159.0
90″	2.81	110.6	4.54	178.8
100″	3.12	122.9	5.05	198.7
120″	3.75	147.5	6.06	238.5
150″	4.68	184.3	7.57	298.1
200″	6.24	245.8	10.09	397.4
250″	7.80	307.2	12.62	496.8
300″	9.36	368.7	15.14	596.2

Projection Screen Selection

ViewSonic Pro8100's preset image modes are calibrated based on a no-gain, pure flat white projection screen. For best preset performance, it is highly recommended to use a no-gain, flat white professional projection screen. The projection screens used in most office are gain-screens. Material used in brightness gain screen will cause decrease in viewing angle and hot-spot symptom. Black level and contrast performances can also be altered by the gain-screen since the gain will also boost the dark level brightness. The so-called hi-contrast gray projection screen can also alter the contrast and black level performance. The best viewing performance can not be brought by the standard factory presets, when using these types of projection screens.

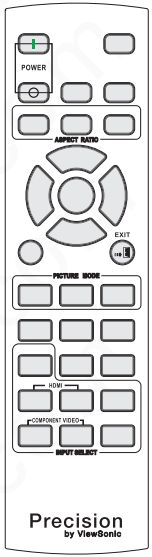
Please seek professional help for adapting a specialized screen, when calibrating the projector settings manually.

« NOTE »

- Position the projector in a horizontal position; other positions can cause heat build-up and damage to the projector.
- Make sure all intake and exhaust ventilation are not blocked.
- Do not use the projector in a smoky environment. Smoke residue can cause buildup on critical parts.

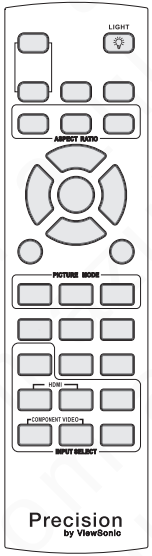
Chapter 3: Remote Control direct access

Power



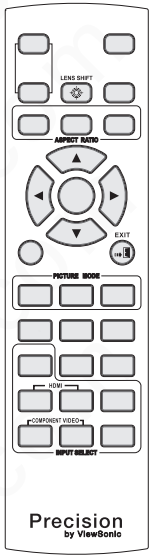
Power button to turn on or off the projector.	
Power ON	Press ⏻ on the remote control/top panel to turn on projector.
Power OFF	Press ⏻ on the remote control/top panel, it would pop up a confirmation screen showing: "Press Power Button Again to power off." Once this confirmation pops up, Press ⏻ on the remote control/top panel again to turn the power off. After lamp cooling cycle is completed, the unit will enter Stand-By mode.
Cancel Power OFF	Press EXIT on the remote control to cancel the power off process, once this confirmation pops up.

Light



To illuminate remote control key pad backlight.	
Light ON, no action	Press LIGHT on the remote control to illuminate the remote control keypad backlight. Backlight will automatically switch off after 10 seconds, if no other key is pressed.
Light ON, action	Press any remote control key will illuminate the keypad backlight and calls up the function at the same time. Backlight will automatically switch off after 10 seconds, if no other key is pressed.

Lens Shift



Motorized vertical and horizontal lens shift for positioning display image without physically moving the unit.

Press LENS SHIFT on the remote control to evoke lens shift adjustment function.

Press EXIT on the remote control to leave the adjusting section.

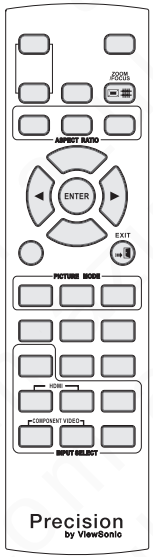
Press ▲ on the remote control/top panel to move display image up.

Press ▼ on the remote control/top panel to move display image down.

Press ► on the remote control/top panel to move display image right.

Press ◄ on the remote control/top panel to move display image left.

Zoom and Focus



Motorized zoom and focus adjust.

Press ZOOM /FOCUS on the remote control to browse through zoom and focus adjust options.

Press ENTER on the remote control to confirm the selection.

Press EXIT on the remote control to leave the adjusting section.

Enlarge/minimise the image optically.

Press ► on the remote control/top panel to Zoom in.

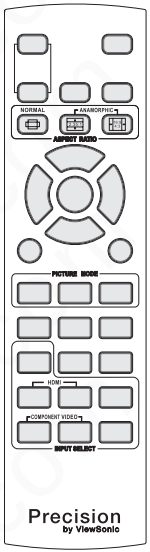
Press ◄ on the remote control/top panel to Zoom out.

Adjust the clarity and sharpness of the image optically.

Press ► and ◄ on the remote control/top panel to adjust the focus.

ENG

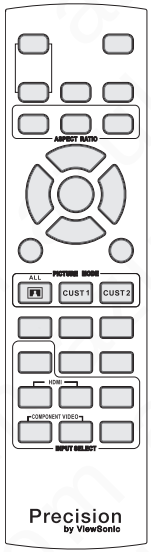
Aspect Ratio



Selections of screen proportion. Press NORMAL on the remote control to browse through available aspect ratio options.	
NORMAL	Normal: Browse through standard aspect ratio modes.
2.35:1	Anamorphic 1: Use in conjunction of 16:9 to 2.35:1 conversion lens. Morphing a 2.35:1 film content from a 16:9 letter box to a full screen 2.35:1 output.
16:9 4:3	Anamorphic 2: Use in conjunction of 16:9 to 2.35:1 conversion lens. Morphing a 4:3 or 16:9 film contents from a 16:9 format to a 2.35:1 format.

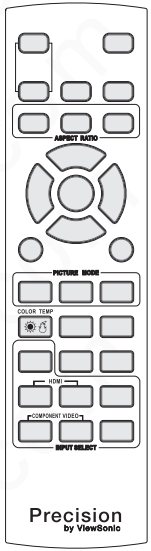
Note: Requires use of optional .Anamorphic lens. ViewSonic does not provide this optional lens. For more details on where to purchase the Anamorphic 2.35:1 lens, please visit www.viewsonic.com

Picture Modes



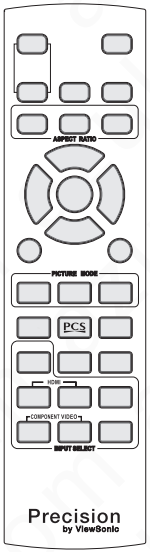
Selections of picture modes, for easy access to ViewSonic customized presets and customized settings. Press PICTURE MODE (ALL / CUST1 / CUST2) on the remote control to browse through available picture modes. All: Browse through Normal, Vivid, Cinema and Professional picture mode. CUST 1: Recall customized setting 1. CUST 2: Recall customized setting 2.	
	Normal: Image is presented in original content. All special enhancement features are off.
	Vivid: High contrast, richer color and detail enhancement. Attention: Extended viewing may cause fatigue to the eyes.
	Cinema: Emphasis on enhancements of skin tone performance and cinematic effect.
	Professional: Emphasis on grayscale accuracy and color performance.
	Cust 1: Recall customized settings 1.
	Cust 2: Recall customized settings 2.

Color Temperature



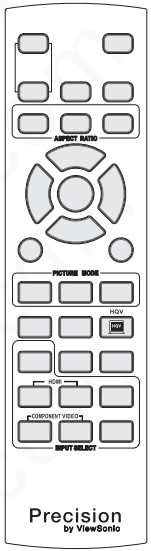
Selections of color shading. Press COLOR TEMP on the remote control to browse through selections of color temperature.	
	14,000K: Deep blue sky color shade.
	11,000K: Light blue sky color shade.
	8,500K: Balanced color shade.
	6,500K: Daylight color, slightly reddish shade.
	5,000K: Dusky sky alike color shade.
	User: Recall customized color temperature settings in user memory

PCS (Precision Color System)



PCS consists of advanced color enhancement functions such as flesh tone correction, edge enhancement, gamma correction and 3D color management. Preset or customized settings can be selected in the OSD menu, PCS Settings section (page 33). Press PCS on the remote control to turn on or off the PCS feature.	
PCS PRECISION COLOR SYSTEM (Color)	PCS ON.
USER	Customized PCS settings.
PCS PRECISION COLOR SYSTEM (B&W)	PCS OFF.

HQV

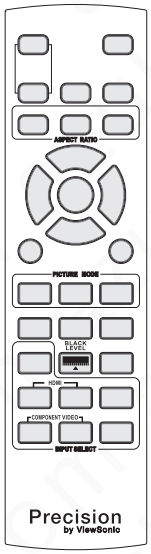


HQV (Hollywood Quality Video) consists of image enhancement functions such as advanced motion, adaptive noise reduction, advanced film mode detection and advanced details enhancement. User HQV settings can be defined in Advanced Operation section (page 26).

Press HQV on the remote control to turn on or off the HQV feature.

HQV (Green)	HQV ON.
HQV (Red)	HQV OFF.

Black Level

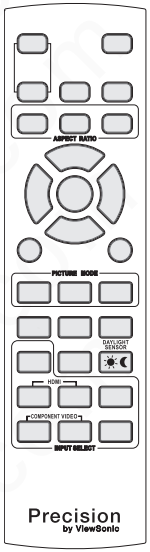


Black level defines the brightness levels at the darkest visual image point. Higher black level removes color noise at darker grayscales and increase contrast level. However, darker images will be less visible if black level is set too high.

Press BLACK LEVEL on the remote control to browse through available black levels

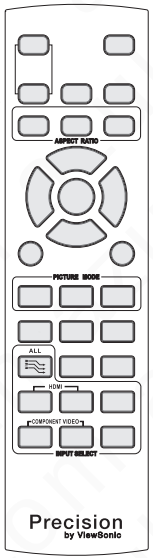
N	Normal: Standard NTSC black level. Contents below standard black level will not be visible.
L	Low: Portion of color noise reduced at darker grayscales.
M	Mid: Majority of color noise reduced at darker grayscales.
H	High: All color noise reduced at darker grayscales.
B	Blacker than black: Black level is defined at 0 IRE. Image details that are darker than standard black level is visible, resulting in brighter images. Make sure the source content's (such as a DVD player) black level filter is turned off.

Daylight Sensor



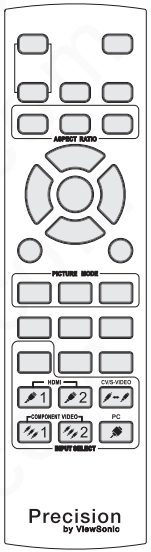
Enable daylight sensor to automatically adjust the best viewing condition based on ambient light condition. Press DAYLIGHT SENSOR on the remote control to turn on or off the daylight sensor.	
	Daylight Sensor AUTO: Automatically adjust for best viewing setting based on room ambient light condition.
	MANUAL: Recall customized setting in user memory.
	Daylight Sensor OFF: All settings will remain constant.

Input Select



Select connected input sources. Press ALL once on the remote control will show source status, press twice or more to browse through available input sources.	
	HDMI: High Definition Multimedia Interface. Combined interface (multiple signals) for digital video and audio. Support up to 1080p. Video performance is constant and less dependence on cable quality in short distance transmission.
	Component Video: Analog/digital video interface transmits via three separate signals – Y, Cb/Pb, Cr/Pr. Support up to 1080p. Video performance relies highly on cable quality when it is in analog format.
	Composite Video: All video signals are combined into one signal line. Lowest video performance quality compared to other input formats.
	S-Video: Separate video. Video signals are transmitted via two lines – Y luminance and C chrominance. A step up in video performance compared to composite video.
	PC: Personal Computer. 15 pins D-sub analog computer VGA signal input.

Direct Input Keys



Direct input source switching without browsing through entire input selections. Press once on the remote control will show source status, press twice for direct input access.	
HDMI 1 2	HDMI 1: Direct access key for HDMI 1 input. HDMI 2: Direct access key for HDMI 2 input.
COMPONENT VIDEO 1 2	Component Video 1: Direct access key for Component Video 1. Component Video 2: Direct access key for Component Video 2.
CVI/S-VIDEO	Composite Video and S-Video selection. Browse through Composite Video and S-Video inputs.
PC	PC: Direct access key for PC input.

Chapter 4: ADVANCED OPERATION (OSD Menu)

1. Main Menu

Press MENU to enter the main menu (Fig. 1-2).

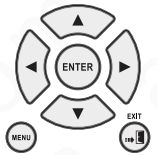


Fig. 1-1

OSD Navigation Keys

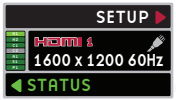
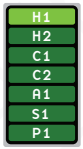


Fig. 1-2

Main Menu



Press ▼ or ALL to go to the next input source.

Press ▲ to go to the previous input source.

Press ENTER to confirm the input source selection.

Input Source Status Indicator:

HDMI 1 1600 x 1200 60Hz	H1 and H2: HDMI input source 1 and 2.
COMPONENT VIDEO 1 1080i	C1 and C2: Component Video input source 1 and 2.
COMPOSITE VIDEO NTSC	A1: Composite Video input source.
S-VIDEO NTSC	S1: S-Video input source.
PC 1280 x 1024 60Hz	P1: PC VGA input source.

Input Source Content Type:

HD1080i	Here displays the source content format, for example HD 1080p, HD 1080i, HD 720p, 480p, 480i, NTSC, PAL or PC resolutions.

2. Setup Menu

From the Main Menu, press ▶ to enter the Setup Menu (Fig. 2).

Use ◀, ▶, ▲ and ▼ to navigate the Setup Menu Selections:

Press ENTER to confirm the Sub-Menu selection.

Press EXIT to go to previous menu. Double click EXIT to exit OSD setting.

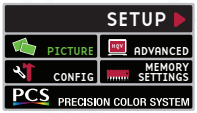


Fig. 2

Setup Menu

PICTURE	Picture adjustment Sub-Menu.
ADVANCED	Advanced features adjustment Sub-Menu.
CONFIG	System Configuration Sub-Menu.
MEMORY SETTINGS	Memory Settings Sub-Menu.
PCS PRECISION COLOR SYSTEM	PCS Settings Sub-Menu

2-1. Picture Sub-Menu

Use ▲ and ▼to navigate the Picture Sub-Menu (Fig. 2-1) Selections:
Press ENTER to confirm the Sub-Menu selection.
Press to go to previous menu.

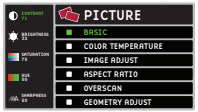


Fig. 2-1
Picture Sub-Menu

BASIC	Selections of Contrast, Brightness, Saturation, Hue and Sharpness.
COLOR TEMPERATURE	Selections of Color Temperatures.
IMAGE ADJUST	Selections of PC timing adjustments.
ASPECT RATIO	Selections of Screen aspects.
OVERSCAN	Overscan selections and manual adjustments.
GEOMETRY ADJUST	Selections of V. Keystone, H. Keystone, Rotation & Auto Keystone On & Off.

2-1-1 Basic Sub-Menu

Use ▲ and ▼ to navigate the Basic Sub-Menu Selections.
Press ENTER to confirm the Sub-Menu selection.
Press to go to previous menu.

Fig. 2-1-1
Basic Sub-Menu

Contrast: Adjust contrast level.
Press ▶ to increase the gain; press ◀ to decrease the gain.

Brightness: Adjust brightness level.
Press ▶ to increase the gain; press ◀ to decrease the gain.

Saturation: Adjust color saturation level.
Press ▶ to increase the saturation; press ◀ to decrease the saturation.

Hue: Adjust green and red balance.
Press ▶ to increase green; press ◀ to increase the red.

Sharpness: Adjust the finest of image.
Press ▶ to sharpen the image; press ◀ to soften the image.

ENG

2-1-2 Color Temperature Sub-Menu

Use ▲ and ▼ to navigate the Color Temperature Sub-Menu Selections.
Press ENTER to confirm the Sub-Menu selection.
Press ESC to go to previous menu.

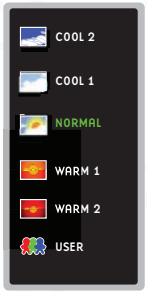


Fig. 2-1-2
Color Temperature Sub-Menu

Cool 2	14,000K color temperature.
Cool 1	11,000K color temperature.
Normal	8,500K color temperature.
Warm 1	6,500K color temperature.
Warm 2	5,000K color temperature.
User	Customized color temperature (See page 37 for details see user color setting.).

2-1-3 Image Adjust Sub-Menu

These functions can only be utilized in PC input.
Use ▲ and ▼ to navigate the Image Adjust Sub-Menu Selections.
Press ENTER to confirm the Sub-Menu selection.
Press ESC to go to previous menu.

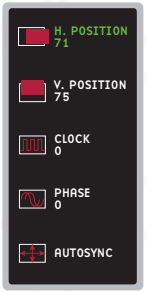


Fig. 2-1-3
Image Adjust Sub-Menu

Adjust the horizontal position of image.
Press ▶ to move image to the right; press ◀ to move image to the left.

Adjust the vertical position of image.
Press ▶ to move image upward; press ◀ to move the image downward.

Adjust the clock frequency.
Press ▶ to increase clock freq.; press ◀ to decrease clock freq.

Adjust phase timing.
Press ▶ to shift phase to right; press ◀ to shift phase to left.

Synchronize image timing automatically
Press ENTER to run the Auto Sync.

2-1-4 Aspect Ratio

These functions can only be utilized in video inputs.
Use ▲ and ▼ to navigate the Image Adjust Sub-Menu Selections.
Press ENTER to confirm the Sub-Menu selection.
Press ⏭ to go to previous menu.

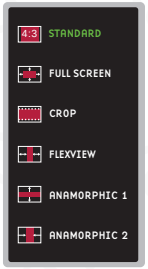


Fig. 2-1-4
Aspect Ratio Sub-Menu

Standard	Original content aspect ratio
Full Screen	Full screen by linear stretching.
Crop	Full screen by cropping.
Flexview	Full screen by non-linear stretching.
Anamorphic 1	Anamorphic 1: Use in conjunction of 16:9 to 2.35:1 conversion lens. Morphing a 2.35:1 film content from a 16:9 letter box to a full screen 2.35:1 output.
Anamorphic 2	Anamorphic 2: Use in conjunction of 16:9 to 2.35:1 conversion lens. Morphing a 4:3 or 16:9 film contents from a 16:9 format to a 2.35:1 format.

Note: Requires use of optional .Anamorphic lens. ViewSonic does not provide this optional lens. For more details on where to purchase the Anamorphic 2.35:1 lens, please visit www.viewsonic.com

2-1-5 Overscan

Overscan controls portions of image being pushed out of the display area.
Use ▲ and ▼ to navigate the Overscan Sub-Menu Selections.
Press ENTER to confirm the Sub-Menu selection.
Press ⏭ to go to previous menu.

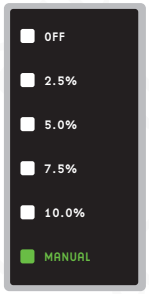


Fig. 2-1-5
Overscan Sub-Menu

OFF	No overscan.
2.5%	2.5% overscan.
5.0%	5.0% overscan.
7.5%	7.5% overscan.
10.0%	10.0% overscan.
MANUAL ▲10.0% ▼10.0% ◀10.0% ▶10.0%	
Press ◀ and ▶ to navigate the Manual Overscan selections. Press ▲ and ▼ to set overscan portions	

Note: 1080i and 1080p maximum overscan is 7.5%

2-1-6 Geometry Adjust

Adjust image geometry distortion caused by improper placement of projector electronically.
Note: For best video performance, it is highly recommended to correct image distortion by physically correct the placement of the unit.
Use ▲ and ▼ to navigate the Geometry Adjust Sub-Menu Selections.
Press ENTER to confirm the Sub-Menu selection.
Press MENU to go to previous menu.

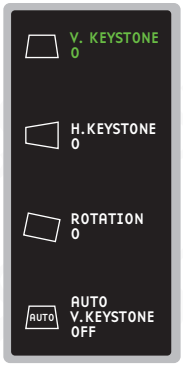


Fig. 1-6
Geometry Adjust Sub-Menu

Press ◄ and ► to set figures of vertical keystone

Press ◄ and ► to set figures of horizontal keystone

Press ◄ and ► to set figures of rotation

Press ◄ and ► to toggle auto vertical keystone on or off.

2-2. Advanced Sub-Menu

Advanced options for image quality enhancement.
Use ▲ and ▼ to navigate the Advanced features (Fig. 2-2) Selections:
Press ENTER to confirm the Sub-Menu selection.
Press MENU to go to previous menu.

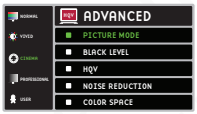


Fig. 2-2
Advanced Sub-Menu

PICTURE MODE	Selections of Normal, Vivid, Cinema, Professional and User image modes.
BLACK LEVEL	Selections of Normal, Low, Mid, High and Blacker than Black black-level.
HQV	Selections of HQV Detail Enhancement, Advanced Film Mode detection, LTI and CTI.
NOISE REDUCTION	Selections of Motion adaptive HQV Noise Reduction, TNR, MNR and BAR.
COLOR SPACE	Selections of RGB, YCbCr, YPbPr and Auto color space.

2-2-1 Picture Mode

ViewSonic customized presets for various viewing pleasures.
Use ▲ and ▼ to navigate the image Mode (Fig. 2-2-1) Selections.
Press ENTER to confirm the Sub-Menu selection.
Press to go to previous menu.

Fig. 2-2-1
Image Mode

NORMAL	Normal: Image is presented in original content. All special enhancement features are off.
VIVID	Vivid: High contrast, richer color and detailed enhancement. Attention: Long time viewing may cause fatigue to the eyes.
CINEMA	Cinema: Emphasis on enhancements of skin tone performance and cinematic effect.
PROFESSIONAL	Professional: Emphasis on grayscale and color accuracy. Easier viewing condition with tradeoff to contrast and color vividness.
USER	User: Recall customized settings in user memory.

2-2-2 Black Level

Black Level selections for visual brightness levels of the virtual pure black point in video content.
Use ▲ and ▼ to navigate the Black Level Sub-Menu (Fig. 2-2-2). Selections:
Press ENTER to confirm the Sub-Menu selection.
Press to go to previous menu.

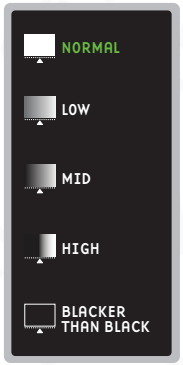


Fig. 2-2-2
Black Level Sub-Menu

N	Normal: Standard NTSC black level. Contents below standard black level will not be visible.
L	Low: Portion of color noises reduced at darker grayscales.
M	Mid: Majority of color noises reduced at darker grayscales.
H	High: All color noises reduced at darker grayscales.
B	Blacker than black: Black level is defined at 0 IRE. Image details that are darker than standard black level is visible, resulting in brighter images. Make sure the source content's (such as a DVD player) black level filter is turned off.

2-2-3 HQV

Selections of HQV (Hollywood Quality Video) for further details enhancements, film detecting modes, and luminance level adjustments.

Use ▲ and ▼ to navigate the Basic Sub-Menu (Fig. 2-2-3) Selections.

Press ENTER to confirm the Sub-Menu selection.

Press to go to previous menu.

Fig. 2-2-3
HQV Sub-Menu

Detail Enhancement: Enrich details in lower resolution video contents (HD Simulation for SD/ED video.).

Press ▶ to increase details; press ◀ to lessen details.

Auto: Automatically switch between video and film modes of the video content.

Video: Automatically de-Interlace video signals to achieve optimum viewing quality.

Film: Automatically detects fitting cadence of film for optimum viewing quality.

Press ◀ and ▶ to select film mode.

Selections of luminance levels.

Off: No luminance level enhancement.

Low: Low luminance level.

High: High luminance level.

Auto: Automatic luminance level correction.

Select the chrominance level.

Off: No chrominance level enhancement.

Low: Low chrominance level.

High: High chrominance level.

Auto: Automatic chrominance level correction.

2-2-4 Noise Reduction

HQV technology reduces the irrelevant or noise data (Minimum loss of good data) from signal and creates better viewing quality.

Use ▲ and ▼ to navigate Selections of Noise Reduction Sub-Menu (Fig. 2-2-4).

Press ENTER to confirm the Sub-Menu selection.

Press to go to previous menu.

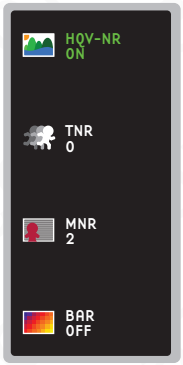
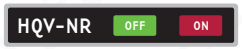


Fig. 2-2-4
Noise Reduction Sub-Menu



To turn On or Off HQV-noise reduction. HQV NR is a per-pixel motion & noise adaptive temporal filter.

Temporal Recursive Noise Reduction: Filter out the differences by comparing multiple image frames. This technique works best with still image.

Press ▶ to further reduce noise; press ◀ to restore the original state

Mosquito Noise Reduction: Reduce noise artifacts around object edges.

Press ▶ to further reduce noise; press ◀ to restore the original state

Block Artifact Removal: Remove block artifact caused by motion image processing.

Select ON to remove artifacts; OFF to restore the original state

2-2-5 Color Space

Select the correct color spacing for the given input video format. Wrong selection may result in abnormal color performance. Selections.
Use ▲ and ▼ to navigate Selections of Color Space Sub-Menu (Fig. 2-2-5)
Press ENTER to confirm the Sub-Menu selection.
Press MENU to go to previous menu.

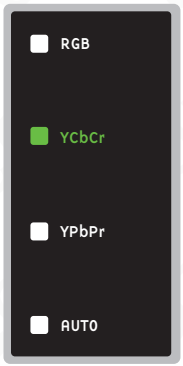


Fig. 2-2-5
Color Space Sub-Menu

RGB	For RGB video format. No subsampling. All information is accurately transmitted.
YCbCr	For component video YCbCr video format. Some subsampling to the color information resulting in reduced transmission with little impact on what is perceived by the viewer. Used in most higher-end digital formats.
YPbPr	For component video YPbPr video format. Best color sampling ratio, used as an intermediate format in high-end film scanners and cinematic production.
AUTO	Automatically choose the most suitable chroma subsampling scheme. Recommended !!

2-3 Config Sub-Menu

Configuration options for basic Projector settings
Use ▲ and ▼ to navigate the Config Sub-Menu (Fig. 2-3) Selections.
Press ENTER to confirm the Sub-Menu selection.
Press MENU to go to previous menu.

Fig. 2-3
Config Sub-Menu
Projection Front / Desk

PROJECTOR SETTINGS	Selections of Auto Source, Fixed Sync, Auto Shutdown, Lamp mode, Daylight Sensor and Projection.
OSD	Selections of OSD Location, Time out and Transparency.
LANGUAGES	Selections of English, German, French, Spanish, Portuguese, Italian, Russian, Swedish, Finnish, Simplified Chinese & Traditional Chinese.
TIMERS	Selections of Lamp Timer Reset, Filter Timer Reset & System Time.
HIGH ALTITUDE	Selections of fan speed for operating at High altitude or Normal environment.
AUTO IRIS	Selections of automatically adjusting the light output for better contrast performance and feature off.

2-3-1 Projector Settings

Projector Setting selections

Use ▲ and ▼ to navigate Selections of Projector Settings Sub-Menu (Fig. 2-3-1)

Press ENTER to confirm the Sub-Menu selection.

Press EXIT to go to previous menu.

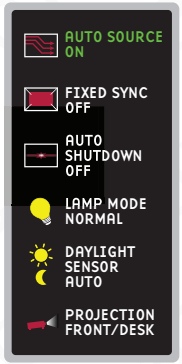


Fig. 2-3-1

Projector Settings Sub-Menu

Automatically select the next active input source

Select ON to enable the feature; OFF to disable the feature

Use default timing data stored in the projector instead of consistent auto sync sampling. Auto sync will cause incorrect image sizing If the on-screen image has black border. The problem is further complicated if the source content's screen resolution is not consistent.

Select ON to enable the feature; OFF to disable the feature

Automatically shut down the projector after standby 5 / 15 / 30 / 45 / 60 minutes or feature off.

Select lamp power efficiency mode

Normal: Standard mode, maximum lumen and power output

Eco: Reduced power, less fan noise, and lamp life can be extended.

Adjust the viewing condition based on ambient light environment

OFF: Disable the feature

Auto: Enable the feature and adjust automatically

Manual: Enable the feature and adjust manually

Manually choose the light rate.

Low: Dim environment

Middle: Average light environment

High: Bright environment

Projection method selections

Use ▲ and ▼ to choose the right projection method.

2-3-2 OSD

OSD location

Use ▲ and ▼ to navigate Selections of Projector Settings Sub-Menu (Fig. 2-3-1)

Press ENTER to confirm the Sub-Menu selection.

Press EXIT to go to previous menu.

Fig. 2-3-2

OSD Sub-Menu

OSD location on the projected screen

Press ◄►▲▼ to navigate and select the best position for OSD location.

OSD timeout timing (seconds) setting

Press ► to expand the timeout timing or ◄ to decrease

OSD Transparency selections

Press ► or ◄ to select various transparency settings.

2-3-3 Languages

OSD language selections.

Use ▲ and ▼ to navigate the Languages Sub-Menu (Fig. 2-3-3) Selections.

Press ENTER to confirm the Sub-Menu selection.

Press EXIT to go to previous menu.

Fig. 2-3-3

Languages Sub-Menu

Select preferred language

2-3-4 Timers

Timer settings

Use ▲ and ▼ to navigate the Timers Sub-Menu (Fig. 2-3-4) Selections.

Press ENTER to confirm the Sub-Menu selection.

Press ⇦ to go to previous menu.

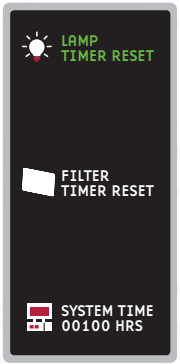


Fig. 2-3-4

Timers Sub-Menu

Reset Lamp timer. Reset Lamp timer after each replacement of new lamp.

This timer is for user's own tracking purpose; the lamp warranty time will not be renewed by this act. (See section ??? for lamp warranty details.)

Reset filter Timer. Reset filter timer after each cleaning or replacement of new filter.

Total Projector operating time (Operating timer cannot be changed by user).

2-3-5 High Altitude

Using Projector in high altitude. Projector fan spins faster to accommodate the low-atmospheric pressure environment.

Use ▲ and ▼ to navigate Selections of High Altitude Sub-Menu (Fig. 2-3-5).

Press ENTER to confirm the Sub-Menu selection.

Press ⇦ to go to previous menu.

Fig. 2-3-5

High Altitude Sub-Menu

ON: Projector is used in high altitude.

High fan speed mode.

OFF: Projector is not used in high altitude.

Normal fan speed mode.

2-3-6 Auto Iris

Automatically control the portion of projected light to increase contrast and transition speed
Use ▲ and ▼ to navigate Selections of Auto Iris Sub-Menu (Fig. 2-3-6).
Press ENTER to confirm the Sub-Menu selection.
Press to go to previous menu.

Fig. 2-3-6
Auto Iris Sub-Menu

AUTO IRIS OFF	Enable Auto Iris feature
AUTO IRIS ON	Disable Auto Iris feature

2-4 PCS Settings Sub-Menu

PCS Setting selections
Use ▲ and ▼ to navigate Selections of PCS Setting Sub-Menu (Fig. 2-4)
Press ENTER to confirm the Sub-Menu selection.
Press to go to previous menu.

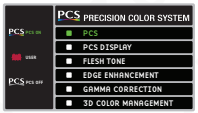


Fig. 2-4
PCS Settings Sub-Menu

PCS	Precision Color System
PCS DISPLAY	Split screen for Precision Color System comparison
FLESH TONE	Skin tone correction
EDGE ENHANCEMENT	Emphasis on image edges
GAMMA CORRECTION	Personalized gamma correction.
3D COLOR MANAGEMENT	Advanced colors enhancement management.

2-4-1 PCS

PCS image management
Use ▲ and ▼ to navigate Selections of PCS Sub-Menu (Fig. 2-4-1)
Press ENTER to confirm the Sub-Menu selection.
Press to go to previous menu.

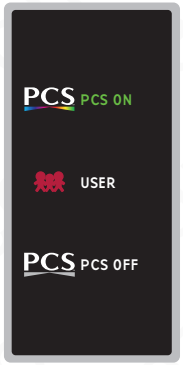


Fig. 2-4-1
PCS Settings Sub-Menu

PCS PCS ON	
	Enable all default PCS settings
USER	
	Customized PCS settings.
PCS PCS OFF	
	Disable all PCS enhancement settings

2-4-2 PCS Display

PCS display selections:
Use ▲ and ▼ to navigate Selections of PCS display Sub-Menu (Fig. 2-4-2)
Press ENTER to confirm the Sub-Menu selection.
Press to go to previous menu.

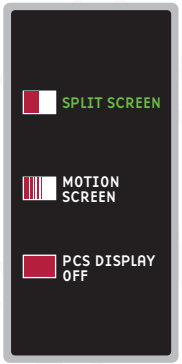


Fig. 2-4-2
PCS display Sub-Menu

SPLIT SCREEN	Split screen Left half – PCS enabled screen Right half – PCS disabled screen
MOTION SCREEN	Motion screen Left portion of the bar – PCS enabled screen Right portion of the bar – PCS disabled screen
PCS DISPLAY OFF	PCS display off PCS enabled in full screen

2-4-3 Flesh tone

Skin tone correction

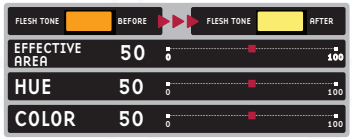
Use ▲ and ▼ to navigate Selections of Flesh tone Sub-Menu (Fig. 2-4-3) Selections.

Press ENTER to confirm the Sub-Menu selection.

Press ⏭ to go to previous menu.

Fig. 2-4-3

Flesh tone Sub-Menu



Effective Area: The affected color range adjustment.

Press ▶ to increase range; press ◀ to decrease range.

Hue: Gradation adjustment of the output color

Press ▶ or ◀ to adjust the selected color

Color: Saturation adjustment of the output color

Color – Press ▶ for richer color or ◀ for less saturated color

2-4-4 Edge Enhancement

Adjustment of image outline edge thickness

Use ▲ and ▼ to navigate Selections of Edge Enhancement Sub-Menu (Fig. 2-4-4).

Press ENTER to confirm the Sub-Menu selection.

Press ⏭ to go to previous menu.

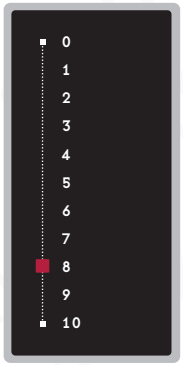


Fig. 2-4-4

Edge Enhancement Sub-Menu

Press ▲ to increase outline thickness or ▼ or to decrease outline thickness.

2-4-5 Gamma Correction

Gamma selections and custom adjustments.

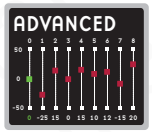
Use ▲ and ▼ to navigate Selections of Gamma Correction Sub-Menu (Fig. 2-4-5).

Press ENTER to confirm the Sub-Menu selection.

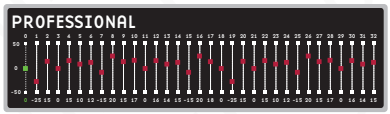
Press ⇥ to go to previous menu.

Fig. 2-4-5

Gamma Correction Sub-Menu



Advanced option: 9 segments of gamma correction for customization.



Professional option: 33 segments of gamma correction for customization.

2-4-6 3D Color Management

Advanced color management. Isolated color correction only affects the selected color.

Use ▲ and ▼ to navigate Selections of 3D Color Management Sub-Menu (Fig. 2-4-6).

Press ENTER to confirm the Sub-Menu selection.

Press ⇥ to go to previous menu.

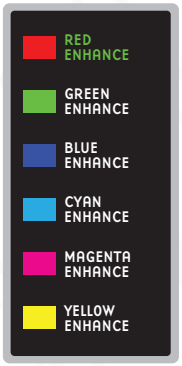


Fig. 2-4-6

3D Color Management Sub-Menu

Red color Enhancement

Hue – Press ▶ for more yellowish or ◀ for magenta tone

Color – Press ▶ for richer color or ◀ for less saturated color

Green color Enhancement

Hue – Press ▶ for a more cyanic or ◀ for yellowish tone

Color – Press ▶ for richer color or ◀ for less saturated color

Blue color Enhancement

Hue – Press ▶ for more magenta or ◀ for cyanic tone

Color – Press ▶ for richer color or ◀ for less saturated color

Cyan color Enhancement

Hue – Press ▶ for a more bluish or ◀ for greenish tone

Color – Press ▶ for richer color or ◀ for less saturated color

Magenta color Enhancement

Hue – Press ▶ for more reddish or ◀ for bluish tone

Color – Press ▶ for richer color or ◀ for less saturated color

Yellow color Enhancement

Hue – Press ▶ for a more reddish or ◀ for greenish tone

Color – Press ▶ for richer color or ◀ for less saturated color

2-5 Memory Settings Sub-Menu

Use ▲ and ▼ to navigate the Memory Settings (Fig. 2-5) Selections.

Press ENTER to confirm the Sub-Menu selection.

Press to go to previous menu.

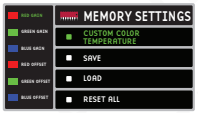


Fig. 2-5

Memory Settings Sub-Menu

CUSTOM COLOR TEMPERATURE	Customized color temperature settings
SAVE	2 slots for saving changed items. All changes should be saved in memory for future use.
LOAD	2 slots for loading changed items. Load previously saved customized data. All customized data can be utilized under "User" section of each adjustment.
RESET ALL	Resetting all ViewSonic defaults. Customized Data will not be overwritten. It can still be recalled by "Load" data option.

2-5-1 Custom Color Temperature

Customize color temperature adjustment. This defines color temperature in white balance and offset colors.

Use ▲ and ▼ to navigate through Custom Color Temperature (Fig. 2-5-1) Selections.

Press ENTER to confirm the Sub-Menu selection.

Press ⏎ to go to previous menu.

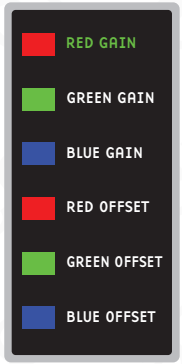


Fig. 2-5-1
Custom Color Temperature
Sub-Menu

Blue color temperature customization

Gain – press ▶ for lighter or ◀ for darker tone at brighter scenes

Blue color temperature customization

Offset – press ▶ for lighter or ◀ for darker tone at darker scenes

Green color temperature customization

Gain – press ▶ for lighter or ◀ for darker tone at brighter scenes

Green color temperature customization

Offset – press ▶ for lighter or ◀ for darker tone at darker scenes

Red color temperature customization

Gain – press ▶ for lighter or ◀ for darker tone at brighter scenes

Red color temperature customization

Offset – press ▶ for lighter or ◀ for darker tone at darker scenes

2-5-2 Save

Saving Changed Items

Use ▲ and ▼ to navigate the Saving (Fig. 2-5-2) Selections.

Press ENTER to confirm the Sub-Menu selection.

Press to go to previous menu.

Fig. 2-5-2

Save Sub-Menu

Yes – confirm. No - cancel

2-5-3 Load

Loading changed items

Use ▲ and ▼ to navigate the Loading (Fig. 2-5-3) Selections.

Press ENTER to confirm the Sub-Menu selection.

Press to go to previous menu.

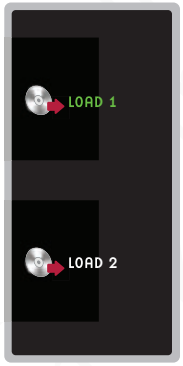


Fig. 2-5-3

Load Sub-Menu

Yes – confirm. No - cancel

2-5-4 Reset

Resets of ViewSonic defaults

Use ▲ and ▼ to navigate the Reset (Fig. 2-5-4) Selections.

Press ENTER to confirm the Sub-Menu selection.

Press to go to previous menu.

Fig. 2-5-4

Reset Sub-Menu

Yes – confirm.

2-5-5 System Status Screen

Press MENU on the remote control to call up the main menu screen (Fig. 2-5-5-1).

Press ◀ on the remote control/side panel to bring up the system status bar (Fig. 2-5-5-1).

The status screen will remain active until it is closed by user.

Press ◀ on the remote control/side panel again to close the system status bar.

Press on the remote control to close the main menu.

Fig. 2-5-5-1

Fig. 2-5-5-2

Status Bar

Lamp timer: Can be reset by user (Refer to timer reset in section 2-3-4). Lamp usage time counter.

0 ~ 2500hrs: Normal status.

2501 ~ 3000hrs: Near lamp life time. Place new order of lamp.

3001hrs or more: Over lamp life time. Please replace with new lamp.

Filter status, display if filter needs to be cleaned/changed

ENG

	Daylight sensor status: Indication if daylight sensor is active. Auto: Daylight sensor is in automatic mode. Manual: Manually select daylight sensor mode. Off: Daylight sensor disabled.
	Precision Color System status, display if PCS is in use On – ViewSonic defined PCS enabled Off – PCS disabled User – User define PCS settings.

	Picture mode: Indication of current picture mode selection. Picture mode include: Normal, Vivid, Cinema, Professional and User.

	System temperature status, display if system is operating under ideal temperature: Normal – System under ideal operating temperature. Caution – System is above normal but below critical. Recommend to check setup environment to return operation temperature to normal. Warning – System temperature above recommend level, please shut down the projector and let it cools down to room temperature before further usage. If temperature is above critical level, system will automatically shut down.
2.00	F/W version

Chapter 5: Making and Recalling the User Adjustments

Making Adjustments

1-1. User Picture Mode Adjustments

User Picture Mode includes the following adjustments:

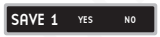
Under "Picture" sub-menu in the OSD

• Contrast • Brightness • Saturation • Hue • Sharpness

Under "Advanced" sub-menu in the OSD

• Black Level • Detail Enhancement

Perform adjustments:

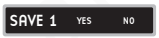
Fig. 1-1 User Picture Mode Select		Press either "CUST 1" or "CUST 2" button on the remote control.
		Icon of the selected one will be displayed on the screen.
		Make the necessary adjustments in "Picture" and "Advanced" sub-menus in the OSD.
		Select "Save 1" to save the settings to memory location 1 ("Save 2" to memory location 2.). Note: Only Picture Mode data will be saved.
		Select "Yes" to confirm and "No" to cancel.

1-2. User Color Temperature Adjustments

User Color Temperature includes the following adjustments:

•Red Gain •Green Gain •Blue Gain •Red Offset •Green Offset •Blue Offset

Perform the adjustments:

Fig. 1-2 Color Temperature Select		Press "Color Temp" button on the remote control.
		Browse through the Color Temperature Selections and choose "User Color Temperature" (Icon of multi-color "Users" will be displayed on the screen).
		Make the necessary adjustments in "Custom Color Temperature" sub-menu in the OSD.
		Select "Save 1" to save the settings to memory location 1 ("Save 2" to memory location 2.). Note: Only color temperature data will be saved.
		Select "Yes" to confirm and "No" to cancel.

1-3. User PCS Adjustments

User PCS includes the following adjustments:

•Flesh Tone •Edge Enhancement •Gamma Correction •3D Color Management

Perform adjustments:

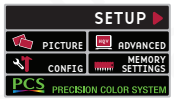
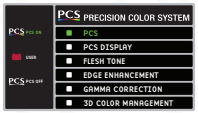
<table>
<tr>
<td rowspan="2"> 

Fig. 1-3 Color Temperature Select</td>
<td>
</td>
<td>Go to PCS sub-menu and select “User” in the OSD.
Note: When PCS “User” mode is selected, Flesh Tone, Edge Enhancement, Gamma Correction and 3D Color Management options will be opened for adjustments.</td>
</tr>
<tr>
<td> 
</td>
<td>Make the necessary adjustments in “Flesh Tone”, “Edge Enhancement”, “Gamma Correction” and “3D Color Management” sub-menus in the OSD.
All adjustments made will be saved immediately to PCS user memory.</td>
</tr>
</table>

2-1 Recalling the User Picture Mode & Color Temperature

Perform adjustments:

Fig. 2-1-1 Memory Settings Sub-Menu

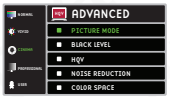


Fig. 2-1-2 Advanced Sub-Menu

<table>
<tr><td colspan="2">User Picture Mode</td></tr>
<tr><td>
</td><td>Press “Menu” button on the remote control.</td></tr>
<tr><td> </td><td>Go to Advanced sub-menu’s Picture Mode Selections and choose “User Picture Mode” (Fig. 2-1-2).</td></tr>
<tr><td colspan="2">User Color Temperature</td></tr>
<tr><td>
</td><td>Press “Color Temp” button on the remote control.</td></tr>
<tr><td> </td><td>Browse through the Color Temperature Selections and choose “User Color Temperature” (Icon of multi-color “Users” will be displayed on the screen).
Note: User Color Temperature can also be selected from the OSD.</td></tr>
<tr><td colspan="2">Load Memory</td></tr>
<tr><td>
</td><td>Go to “Memory Settings” sub-menu in the OSD. Select the “Load” option.</td></tr>
<tr><td>
</td><td>Select “Load 1” to load the settings from memory location 1 to User Picture Mode and User Color Temperature (“Load 2” from memory location 2.).</td></tr>
<tr><td>
</td><td>Select “Yes” to confirm and “No” to cancel.</td></tr>
</table>

2-2 Recalling the User PCS Adjustments

Perform adjustments:

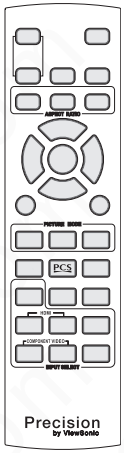


Fig. 2-2 PCS Select

Press the "PCS" button on the remote control.

Browse through the PCS Selections and choose "User PCS" mode (Icon of single color "Users" will be displayed on the screen.).

Note: User PCS can also be selected from the OSD.

2-3 Recalling Both User Picture Mode and User PCS (Custom 1 & 2)

Pro8100 offers two quick access keys (Custom 1 and 2) on the remote control. It provides an easy execution for recalling custom-setting combinations.

Pressing "Cust 1" or "Cust 2" to:

1. "Load 1" if "Cust 1" is pressed ("Load 2" if "Cust 2" is pressed.).
2. Select "User" Picture Mode.
3. Select "User" PCS Mode.

Fig. 2-3 Custom Setting Select

Press "CUST 1" button on the remote control to select custom setting 1 ("CUST 2" to custom setting 2.).

Note: Color Temperature data stored in memory location 1 or 2 will also be recalled to User Color Temperature. Pressing Custom 1 or 2 buttons doesn't mean the User Color Temperature will be selected automatically. Follow the instruction for User Color Temperature recalling in section 2-1 (page 45) for User Color Temperature.

Appendix

Maintenance

The projector needs proper maintenance. You should keep the lens clean as dust, dirt or spots will project on the screen and diminish image quality. If any other parts need replacing, contact your dealer or qualified service personnel. When cleaning any part of the projector, always switch off and unplug the projector first.

Warning:

Never open any of the covers on the projector. Dangerous electrical voltages inside the projector can cause severe injury. Do not attempt to service this product yourself. Refer all servicing to qualified service personnel.

Cleaning the Lens

Gently wipe the lens with Micro-fiber wiping cloth. Do not touch the lens with your hands.

Cleaning the Projector Housing

Gently wipe with a soft cloth. If dirt and stains are not easily removed, use a soft cloth damped with water, or water and neutral detergent, and wipe dry with a soft, dry cloth.

Maintaining the Air Filter

The air filter, which is located at the back of the projector, should be replaced or cleaned when warned by system either because 200 hours of use or rise of internal temperature. If it is not cleaned periodically, it can become clogged with dust and prevent the projector from being ventilated properly. This can cause over heating and damage the projector.

To clean the air filter:

1. Pull down the filter module cover.

2. Remove the filter module cover.

3. Remove the dirty filter directly.

4. Attach the clean air-filter.

5. Attach the filter cover to the projector.

Replacing the Air Filter

The air filter should be replaced when cleaning is ineffective contact an authorized service center for the optional air filter.

« NOTE »

- Turn off the projector and remove the AC power cord from the power outlet before beginning maintenance work.
- Make sure the lens is cool before cleaning.
- Do not use detergents or chemicals other than those noted above. Do not use benzene or thinners.
- Do not use chemical sprays.
- Use a soft cloth or lens paper only.

Replacing the Lamp

Projector lamps have a finite life. Replace the lamp when:

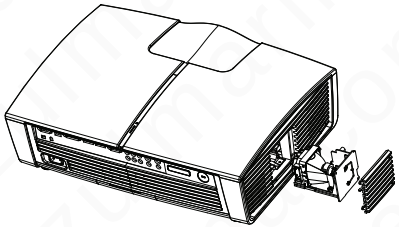
- A warning message "Lamp is approaching the end of its useful life in full power operation. Replacement suggested!" appears on the screen.
- The image becomes darker and hues become weaker after a lamp has been for a long period of time.
- The projector lamp LED indicator turns into amber. Refer to section titled "LED Indicator Messages" for further details.

« NOTE »

- The lamp will remain in high temperature even after the projector's power is turned off. Wait for at least 45 minutes after power off to cool down the lamp. Touching the lamp prior proper cool down time can cause skin scalding.
- Do not touch any glass portion of the lamp at any time. The lamp may explode due to improper handling or grease generated from finger.
- Lamp lifetime may differ from lamp to lamp and according to the environment of use. There is no guarantee of the same lifetime for each lamp. Some lamps may fail or terminate their lifetime in a shorter period of time than other similar lamps.
- A lamp may explode as a result of vibration, shock or degradation as a result of hours of use as its lifetime draws to an end. Risk of explosion may differ according to the environment or conditions in which the projector and lamp are being used.
- Wear protective gloves and eyeglasses when fixing or detaching the lamp.
- Short on-off-cycles will damage the lamp and reduce lamp life. Wait at least for 7 minutes to turn off the projector after powering on.
- Do not operate the lamp in proximity to paper, cloth, or other combustible material nor cover it with such materials. Otherwise it could cause a fire.
- Do not operate the lamp in an atmosphere containing an inflammable substance, such as thinner. Otherwise it could cause a fire or explosion.
- Thoroughly ventilate the area or the room when operating the lamp in an oxygen atmosphere (in the air). If ozone is inhaled, it could cause headaches, nausea, dizziness, etc.
- The lamp contains inorganic mercury. If the lamp bursts, the mercury inside the lamp will go out of the projector. Leave the area immediately if the lamp shatters while being operated and ventilate the area for at least 30 minutes in order to avoid the inhalation of mercury fumes. Otherwise it could be harmful to user's health.

To replace the lamp:

1. Loosen the two screws of lamp cover.
2. Remove the lamp cover.
3. Loosen the two screws of lamp module.
4. Pull out the old lamp module by lamp handle.
5. Mount the new lamp.
6. Replace the lamp cover.
7. Reset the lamp timer.



« NOTE »

- Dispose of the used lamp according to local regulations.
- Ensure that screws are tightened properly. Screws not tightened fully may result in injury or accidents.
- Since the lamp is made of glass, do not drop the unit and do not scratch the glass.
- Do not reuse the old lamp. This could cause the lamp to explode.
- Be sure to turn off the projector and unplug the AC power cord before replacing the lamp.
- Do not use the projector with the lamp cover removed.

Troubleshooting

If you think something is wrong, check the followings before contacting customer service.

If This Happens	Check
No power	* Is the power cord or battery pack plugged in? * Is it connected to the projector?
Power is lost during use	* Is the ambient temperature high? * Is the air intake or air exhaust blocked?
No picture	* Is the projector turned on? * Are the connections set up correctly? * Are all the connected devices functioning properly?
Picture not displayed correctly	* Is the input signal supported by the projector? , * Is something generating an abnormal video signal, for instance the video tape?
Picture blurred Part of picture out of focus	* Is the lens dirty? * Is the lens focus adjusted optimally? * Is the projection distance within the projector's supported range? * Is the projector's screen placement angle tilted too far? * Are the sharpness or sampling phase adjustments off?
Colors too light Bad shading	* Are the color or tint, adjustments off? * Is the screen dirty?

List of Compatible Signals

Analog PC timing			
Mode	Resolution	V-Sync	H Sync
VGA	640 x 480	50 Hz	24.69 kHz
DOS/Text mode	640 x 480	60 Hz	31.5 kHz
visible	640 x 480	72 Hz	37.9 kHz
	640 x 480	75 Hz	37.5 kHz
	640 x 480	85 Hz	43.3 kHz
SVGA	800 x 600	50 Hz	30.99 kHz
	800 x 600	56 Hz	35.2 kHz
	800 x 600	60 Hz	37.9 kHz
	800 x 600	72 Hz	48.1 kHz
	800 x 600	75 Hz	46.9 kHz
	800 x 600	85 Hz	53.7 kHz
XGA	1024 x 768	50 Hz	39.63 kHz
	1024 x 768	60 Hz	48.4 kHz
	1024 x 768	70 Hz	56.5 kHz
	1024 x 768	75 Hz	60.0 kHz
	1024 x 768	85 Hz	68.7 kHz
WXGA	1280x768	60 Hz	47.8 kHz
SXGA	1280 x 1024	64.0 kHz	60 Hz
	1280 x 1024	80.0 kHz	75 Hz
Coordinated Video	640 x 480	67 Hz	35 kHz
Timing	832 x 624	75 Hz	49.72 kHz
	1024 x 768	75 Hz	60.24 kHz

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Others	1280 x 720	60 Hz	45.1 kHz
	1280 x 800	60 Hz	49.7 kHz
	1280 x 800	75 Hz	62.8 kHz
	1280 x 800	85 Hz	71.6 kHz
	1360 x 768	60 Hz	47.7 kHz
	1400 x 1050	60 Hz	65.3 kHz
	1440 x 900	60 Hz	55.9 kHz
	1600 x 1200	60 Hz	75 kHz
	1680 x 1050	60 Hz	65.3 kHz
	1920 x 1080	60 Hz	33.8 kHz
	1920 x 1080	60 Hz	67.5 kHz

Digital PC timing (HDMI)			
Mode	Resolution	V-Sync	H Sync
VGA (DOS/Text mode visible)	640 x 480	60 Hz	31.5 kHz
480p	720 x 483	60 Hz	31.5 kHz
SVGA	800 x 600	60 Hz	37.9 kHz
XGA	1024 x 768	60 Hz	48.4 kHz
720p	1280 x 720	60 Hz	45 kHz
WXGA	1280 x 768	60 Hz	47.8 kHz
SXGA	1280 x 1024	60 Hz	64.0 kHz
SXGA+	1400 x 1050	60 Hz	65.3 kHz
WSXGA+	1680 x 1050	60 Hz	65.3 kHz
1080i	1920 x 1080	60 Hz	33.8 kHz

1080p	1920 x 1080	60 Hz	67.5 kHz
UXGA	1600 x 1200	60 Hz	75 kHz
Others	1280 x 800	60 Hz	49.7 kHz
	1280 x 960	60 Hz	60.0 kHz
	1360 x 768	60 Hz	47.7 kHz
	1440 x 900	60 Hz	55.9 kHz

Compatible/Supportive timing Note: the Projector may need minor adjustment in the OSD to get optimized performance, when below video signals is input to it through the HDMI connector.			
480i60	720x480	60	15.8k
480p60	720x480	60	31.5k
480p120	720x480	120	61.98k
576i50	720x576	50	15.6k
576p50	720x576	50	31.3k
576p100	720x576	100	61.2k
720p50	1280x720	50	37.5k
720p60	1280x720	60	45.0k
720p120	1280x720	120	92.89k
1080i50	1920x1080	50	28.1k
1080i60	1920x1080	60	33.8k
1080p24	1920x1080	24	27.0K
1080p50 (Native)	1920x1080	50	56.3k
1080p60 (Native)	1920x1080	60	67.5k

LED Indicator Message

Power LED	Status LED	Indicates
Blinking in Green	Off	Standby mode
Green	Green	Warming up
Green	Off	Projector ON.
Green	Blinking in Green	Cooling down
Orange	Green	In-proper shutdown due to power cut off.
Orange	Off	A certain error has been detected.
Orange	Red	Over temp.
Orange	Blinking in Red	Lamp error.

Product Specification

Display type	3 x 0.74-inch LCD projector
Resolution	1920 x 1080 (1.07 Billion Colors)
F #	F = 1.83 – 2.36
Focal Length	f = 23.5 to 37.6 mm
Focus / Zoom	Motorized / Motorized 1.6x
Lens shift	Horizontal: Total of 120% of movement distance, 10% on each side Vertical: Total of 250% of movement distance, 75% on each side
Projection distance	40" – 300"
Computer input	Analog RGB, D-sub 15 pin
Video input	HDMIx2, Component video (YCbCr/YPbPr)x2, Composite videox1, S-Videox1.
Other terminals	RS-232, USB, DC 5V, DC 12V trigger
Computer Compatibility	Please refer to timing table above.
Video Compatibility	NTSC, PAL, SECAM, 480i/p, 576i/p, 720p, 1080i, 1080p/60, 1080p/50, 1080p/24.
Scanning Frequency Horizontal Frequency Vertical Frequency	 15-100kHz 50 - 90Hz
Operating temperature	+41°F (+5°C) to +95°F (+35°C)
Rated voltage	100–120VAC/220–240VAC (Auto Switching)
Dimension (W x H x D)	537 x 170 x 389mm
Weight	19.85 lbs (Approx. 9kg)

RS232 command code

1. Protocol Setting

2. Power ON/OFF command

Command	Send String (HEX)												
Power ON	BE	EF	10	05	00	C6	FF	11	11	01	00	01	00
Power OFF	BE	EF	02	06	00	57	D0	2E	00	00	00	00	00

3. Source select command

Computer (Analog RGB 1)													
Send String (HEX)	BE	EF	02	06	00	0B	D2	32	00	00	00	00	00
Component 1													
Send String (HEX)	BE	EF	02	06	00	DA	D3	33	00	00	00	00	00
Component 2													
Send String (HEX)	BE	EF	02	06	00	85	DA	5C	00	00	00	00	00
S-Video													
Send String (HEX)	BE	EF	02	06	00	6D	D2	34	00	00	00	00	00
Composite Video													
Send String (HEX)	BE	EF	02	06	00	BC	D3	35	00	00	00	00	00

HDMI-1													
Send String (HEX)	BE	EF	02	06	00	8F	D3	36	00	00	00	00	00
HDMI-2													
Send String (HEX)	BE	EF	02	06	00	5E	D2	37	00	00	00	00	00

4.1 Key-Pad & IR command

Command	Send String (HEX)												
Picture mode	BE	EF	02	06	00	3B	D9	42	00	00	00	00	00
Color Temp.	BE	EF	02	06	00	EA	D8	43	00	00	00	00	00
Aspect Ratio	BE	EF	02	06	00	5D	D9	44	00	00	00	00	00
Menu	BE	EF	02	06	00	8C	D8	45	00	00	00	00	00
Exit	BE	EF	02	06	00	BF	D8	46	00	00	00	00	00
Up	BE	EF	02	06	00	6E	D9	47	00	00	00	00	00
Down	BE	EF	02	06	00	91	D9	48	00	00	00	00	00
Left	BE	EF	02	06	00	40	D8	49	00	00	00	00	00
Right	BE	EF	02	06	00	73	D8	4A	00	00	00	00	00
PCS	BE	EF	02	06	00	A2	D9	4B	00	00	00	00	00
Daylight Sensor	BE	EF	02	06	00	15	D8	4C	00	00	00	00	00
Overscan	BE	EF	02	06	00	C4	D9	4D	00	00	00	00	00
Black level	BE	EF	02	06	00	F7	D9	4E	00	00	00	00	00
HQV	BE	EF	02	06	00	26	D8	4F	00	00	00	00	00
Freeze	BE	EF	02	06	00	49	DA	50	00	00	00	00	00
Input	BE	EF	02	06	00	98	DB	51	00	00	00	00	00
V/H keystone	BE	EF	02	06	00	AB	DB	52	00	00	00	00	00

4.2 Key-Pad & IR command 2

Command		Send String (HEX)												
Aspect Ratio	Normal	BE	EF	02	06	00	8A	DF	63	00	00	00	00	00
	Anamorphic 1	BE	EF	02	06	00	3D	DE	64	00	00	00	00	00
	Anamorphic 2	BE	EF	02	06	00	EC	DF	65	00	00	00	00	00
Picture Mode	A11	BE	EF	02	06	00	DF	DF	66	00	00	00	00	00
	Cust 1	BE	EF	02	06	00	0E	DE	67	00	00	00	00	00
	Cust 2	BE	EF	02	06	00	F1	DE	68	00	00	00	00	00

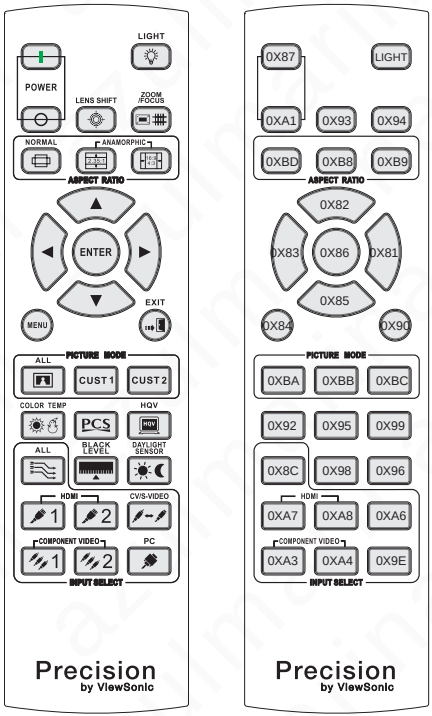
5. Special command

Command	Send String (HEX)												
Lens shift Right	BE	EF	02	06	00	54	DB	5D	00	00	00	00	00
Lens shift Left	BE	EF	02	06	00	67	DB	5E	00	00	00	00	00
Lens shift Up	BE	EF	02	06	00	B6	DA	5F	00	00	00	00	00
Lens shift Down	BE	EF	02	06	00	B9	DF	60	00	00	00	00	00
Focus +	BE	EF	02	06	00	E3	DA	5A	00	00	00	00	00
Focus -	BE	EF	02	06	00	32	DB	5B	00	00	00	00	00
Zoom +	BE	EF	02	06	00	68	DE	61	00	00	00	00	00
Zoom -	BE	EF	02	06	00	5B	DE	62	00	00	00	00	00

6. Data get

Command	Send String (HEX)																	
	Byte 0 ~ Byte 11												Byte12 ~ Byte18					
Error Code Get	BE	EF	1A	0C	00	7A	46	4F	00	01	00	00	00	00	00	00	00	00
Filter Counter Get	BE	EF	1A	0C	00	91	93	50	00	01	00	00	00	00	00	00	00	00
Temp Get	BE	EF	1A	0C	00	52	6E	51	00	01	00	00	00	00	00	00	00	00
Lamp Life Get	BE	EF	1A	0C	00	56	6A	52	00	01	00	00	00	00	00	00	00	00
Unit on time Get	BE	EF	1A	0C	00	89	8B	5A	00	01	00	00	00	00	00	00	00	00
Return	1E	—	—	—	—													

Remote control code



Note: Manufacture prefix code needs to be added to the IR command code. ViewSonic manufacture prefix code is 0x83, 0xF4.

Complete IR command code table:

Code Protocol Type: NEC format

Command	Function Name	Description
0x87	Power On	Discrete Power On.[1]
	Power On/Off	Toggle Power On/Off.[2]
0xA1	Power Off	Discrete Power Off
0x9E	PC	Direct PC select
0x9B	Component Video	Component 1/2 browse
0xA3	Component 1	Direct Component 1 select
0xA4	Component 2	Direct Component 2 select
0xA6	CV/S-Video	CV/S-Video browse
0x9C	S-Video	Direct S-Video select
0x9D	CV	Direct CV select
0x9A	HDMI	HDMI 1/2 browse
0xA7	HDMI 1	Direct HDMI 1 select
0xA8	HDMI 2	Direct HDMI 2 select
0x91	Picture Mode	All mode browse
0xBA	Picture Mode All	All mode browse excl. user.
0xBB	Cust 1	Custom mode 1
0xBC	Cust 2	Custom mode 2
0x92	Color Temp	Color Temp browse
0x8E	Aspect Ratio	All AR browse
0xBD	Normal AR	Normal AR browse
0xB8	Anamorphic 1	Anamorphic 1 AR direct
0xB9	Anamorphic 2	Anamorphic 2 AR direct
0x93	Lens Shift	

Command	Function Name	Description
0x94	Zoom/Focus	Zoom/Focus toggle
0x8D	V/H Keystone	V/H Keystone toggle
0x82	Up	
0x85	Down	
0x83	Left	
0x81	Right	
0x86	Enter	Confirm selection
0x84	Menu	Open/Exit OSD
0x90	Exit	Cancel selection
0x95	PCS	PCS browse
0x96	Daylight Sensor	DS browse
0x97	Overscan	Overscan browse
0x98	Black Level	Black Level browse
0x99	HQV	HQV enable
0x80	Freeze	Image freeze
0xB0	Lens Shift Right	
0xB1	Lens Shift Left	
0xB2	Lens Shift Up	
0xB3	Lens Shift Down	
0xB4	Focus +	
0xB5	Focus -	
0xB6	Zoom +	
0xB7	Zoom -	

[1] When discrete code mode is enabled.

[2] When discrete code mode is disabled.

Customer Support

For technical support or product service, see the table below or contact your reseller.

Note : You will need the product serial number.

Country/Region	Web Site	T=Telephone F=Fax	E-mail
Australia/New Zealand	www.viewsonic.com.au	AUS=1800 880 818 NZ=0800 008 822	service@au.viewsonic.com
Canada	www.viewsonic.com	T (Toll-Free)= 1-866-463-4775 T (Toll)= 1-424-233-2533 F= 1-909-468-1202	service.ca@viewsonic.com
Europe/Middle East/Baltic countries/North Africa	www.viewsoniceurope.com	Contact your reseller	
Hong Kong	www.hk.viewsonic.com	T= 852 3102 2900	service@hk.viewsonic.com
India	www.in.viewsonic.com	T= 1800 11 9999	service@in.viewsonic.com
Korea	www.kr.viewsonic.com	T= 080 265 9080	service@kr.viewsonic.com
Latin America (Argentina)	www.viewsonic.com/la/	T= 0800 666 0194	soporte@viewsonic.com
Latin America (Brazil)	www.viewsonic.com/la/	T= 0800 891 6984	soporte@viewsonic.com
Latin America (Chile)	www.viewsonic.com/la/	T= 800 440 303	soporte@viewsonic.com
Latin America (Columbia)	www.viewsonic.com/la/	T= 01 800 915 6588	soporte@viewsonic.com
Latin America (Mexico)	www.viewsonic.com/la/	T= 001 800 514 6518	soporte@viewsonic.com
Renta y Datos, 29 SUR 721, COL. LA PAZ, 72160 PUEBLA, PUE. Tel: 01.222.891.55.77 CON 10 LINEAS Electroser, Av Reforma No. 403Gx39 y 41, 97000 Merida, Yucatan. Tel: 01.999.925.19.16 Other places please refer to http://www.viewsonic.com/la/soporte/index.htm#Mexico			
Latin America (Peru)	www.viewsonic.com/la/	T= 0800 53458	soporte@viewsonic.com
Macau	www.hk.viewsonic.com	T= 853 700 303	service@hk.viewsonic.com
Puerto Rico & Virgin Islands	www.viewsonic.com	T= 1-800-688-6688 (English) T= 1-866-379-1304 (Spanish) F= 1-909-468-1202	service.us@viewsonic.com soporte@viewsonic.com
Singapore/Malaysia/ Thailand	www.ap.viewsonic.com	T= 65 6461 6044	service@sg.viewsonic.com
South Africa	www.viewsoniceurope.com	www.viewsoniceurope.com/uk/Support/Calldesk.htm	
United Kingdom	www.viewsoniceurope.com/uk/	www.viewsoniceurope.com/uk/Support/Calldesk.htm	
United States	www.viewsonic.com	T (Toll-Free)= 1-800-688-6688 T (Toll)= 1-424-233-2530 F= 1-909-468-1202	service.us@viewsonic.com

Limited Warranty

VIEWSONIC® PROJECTOR

What the warranty covers:

ViewSonic warrants its products to be free from defects in material and workmanship, under normal use, during the warranty period. If a product proves to be defective in material or workmanship during the warranty period, ViewSonic will, at its sole option, repair or replace the product with a like product. Replacement product or parts may include remanufactured or refurbished parts or components.

How long the warranty is effective:

North and South America: Please check with your local dealer or local ViewSonic office for the warranty information.

Europe: 3 years for all parts excluding the lamp, 3 years for labor, 1 year for the original lamp from the date of the first consumer purchase.

Other regions or countries: Please check with your local dealer or local ViewSonic office for the warranty information.

Lamp warranty subject to terms and conditions, verification and approval. Applies to manufacturer's installed lamp only.

All accessory lamps purchased separately are warranted for 90 days.

Who the warranty protects:

This warranty is valid only for the first consumer purchaser.

What the warranty does not cover:

1. Any product on which the serial number has been defaced, modified or removed.
2. Damage, deterioration or malfunction resulting from:
   - **a.** Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
   - **b.** Repair or attempted repair by anyone not authorized by ViewSonic.
   - **c.** Any damage of the product due to shipment.
   - **d.** Removal or installation of the product.
   - **e.** Causes external to the product, such as electric power fluctuations or failure.
   - **f.** Use of supplies or parts not meeting ViewSonic's specifications.
   - **g.** Normal wear and tear.
   - **h.** Any other cause which does not relate to a product defect.
3. Any product exhibiting a condition commonly known as "image burn-in" which results when a static image is displayed on the product for an extended period of time.
4. Removal, installation, and set-up service charges.

How to get service:

1. For information about receiving service under warranty, contact ViewSonic Customer Support (please refer to "Customer Support" page). You will need to provide your product's serial number.
2. To obtain warranted service, you will be required to provide (a) the original dated sales slip, (b) your name, (c) your address, (d) a description of the problem, and (e) the serial number of the product.

3. Take or ship the product freight prepaid in the original container to an authorized ViewSonic service center or ViewSonic.
4. For additional information or the name of the nearest ViewSonic service center, contact ViewSonic.

Limitation of implied warranties:

There are no warranties, express or implied, which extend beyond the description contained herein including the implied warranty of merchantability and fitness for a particular purpose.

Exclusion of damages:

ViewSonic's liability is limited to the cost of repair or replacement of the product. ViewSonic shall not be liable for:

1. Damage to other property caused by any defects in the product, damages based upon inconvenience, loss of use of the product, loss of time, loss of profits, loss of business opportunity, loss of goodwill, interference with business relationships, or other commercial loss, even if advised of the possibility of such damages.
2. Any other damages, whether incidental, consequential or otherwise.
3. Any claim against the customer by any other party.

Effect of state law:

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow limitations on implied warranties and/or do not allow the exclusion of incidental or consequential damages, so the above limitations and exclusions may not apply to you.

Sales outside the U.S.A. and Canada:

For warranty information and service on ViewSonic products sold outside of the U.S.A. and Canada, contact ViewSonic or your local ViewSonic dealer.

The warranty period for this product in mainland China (Hong Kong, Macao and Taiwan Excluded) is subject to the terms and conditions of the Maintenance Guarantee Card.

For users in Europe and Russia, full details of warranty provided can be found in www.viewsoniceurope.com under Support/Warranty Information.

www.azulmarina.com

ViewSonic

www.azulmarina.com

ventas@azulmarina.com